



(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
08.01.1997 Bulletin 1997/02

(51) Int. Cl.⁶: H04N 7/167

(21) Application number: 96110363.7

(22) Date of filing: 27.06.1996

(84) Designated Contracting States:
DE ES FR GB IT

• Dureau, Vincent
Venice, CA 90291 (US)

(30) Priority: 07.07.1995 US 499280

(74) Representative: Hartnack, Wolfgang, Dipl.-Ing. et al
Deutsche Thomson-Brandt GmbH
Licensing & Intellectual Property,
Göttinger Chaussee 76
30453 Hannover (DE)

(71) Applicant: THOMSON CONSUMER

ELECTRONICS, INC.
Indianapolis, IN 46206 (US)

(72) Inventors:

• Rohatgi, Pankaj
Sunnyvale, CA 94086 (US)

(54) **Apparatus and method for authenticating transmitted applications in an interactive information system**

(57) An executable interactive program is combined with audio/video data for transmission. The program is divided (40, 41) into modules, similar to computer files, and a Directory Module is created which links program modules. Security for the executable application is provided (52,53,54) by attaching a signed certificate to respective Directory Modules. The integrity of respective modules is monitored by hashing (46) respective modules and including (50) respective hash values in the Directory Module. A hash value of the Directory Module containing the other hash values is generated (46), encrypted (51) and attached (53,54) to the Directory Module. At a receiver the certificate is decoded and checked for authenticity of provider. If the certificate is authentic the program may be executed but only if receiver generated hash values of respective program modules are identical to corresponding hash values contained in the Directory Module.



